

APPENDIX E

TUOLUMNE RIVER PRIORITY SITES

Tuolumne River
Mile 47.5
Riffle 5A

At this site the channel is narrow, vegetation has encroached into the channel, and the velocities are high. The substrate is large cobble. Spawning conditions at the site could be improved by excavating the cobble and replacing it with graded, washed spawning gravel. Velocities could be improved by either creating a split flow channel or by constructing gravel bars. The site has good access from the south side.

The potential for salmon use is good at this location based on historic use and on use immediately upstream and downstream of the site.

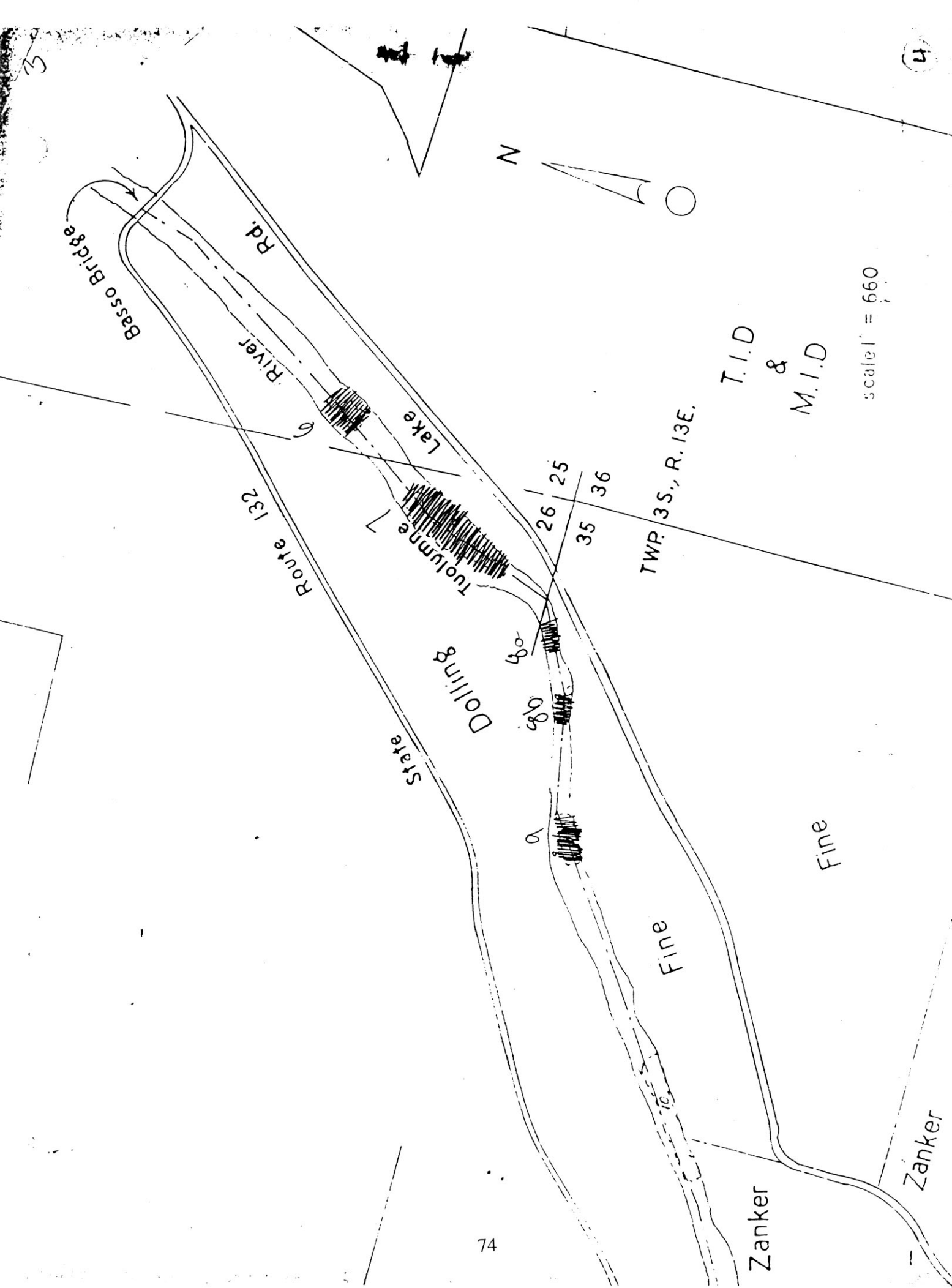
Hand-drawn map of Stanislaus County, California, showing the Tuolumne River, M.I.D. Main Canal, and various land parcels. The map includes labels for 'Inqalls', 'Dolling', 'Rolleri', 'Houret', and 'Stanislaus County'. It also features a '1987 MAY Mark-Recapture Area' and an 'Approx. Study Area'. A scale bar indicates 1 inch equals 660 feet. The map is dated 24/25 and includes a north arrow.

Tuolumne River
Mile 46.5
Riffles 8A and 9

The upstream site, Riffle 8A, has a split flow with cobble in the left channel and lots of spawning use in the right channel. The site has good drop and diversity. It is relatively small -- less than 150 feet long. Restoration could involve a gravel replacement in the left channel or removal of the island and encroached vegetation. Restoration could provide spawning benefits but would need to be constructed in combination with another site to be cost-effective.

Riffle 9 would be beneficial and cost-effective in combination with the construction of Riffle 8. The riffle is about 300 feet long, with good drop and velocities. The gravel at this site is fairly good size and mix for spawning; however, it is silted in. The gravel could be ripped and freed for spawning use.

Both Riffles 8A and 9 have good access off of Lake Road on the south side.



Baso Bridge

Rd.

River

Lake

Dolling

Route 132

State

TWP. 35., R. 13E.

T.I.D
&
M.I.D

scale 1" = 660'



25
26
35
36

Fine

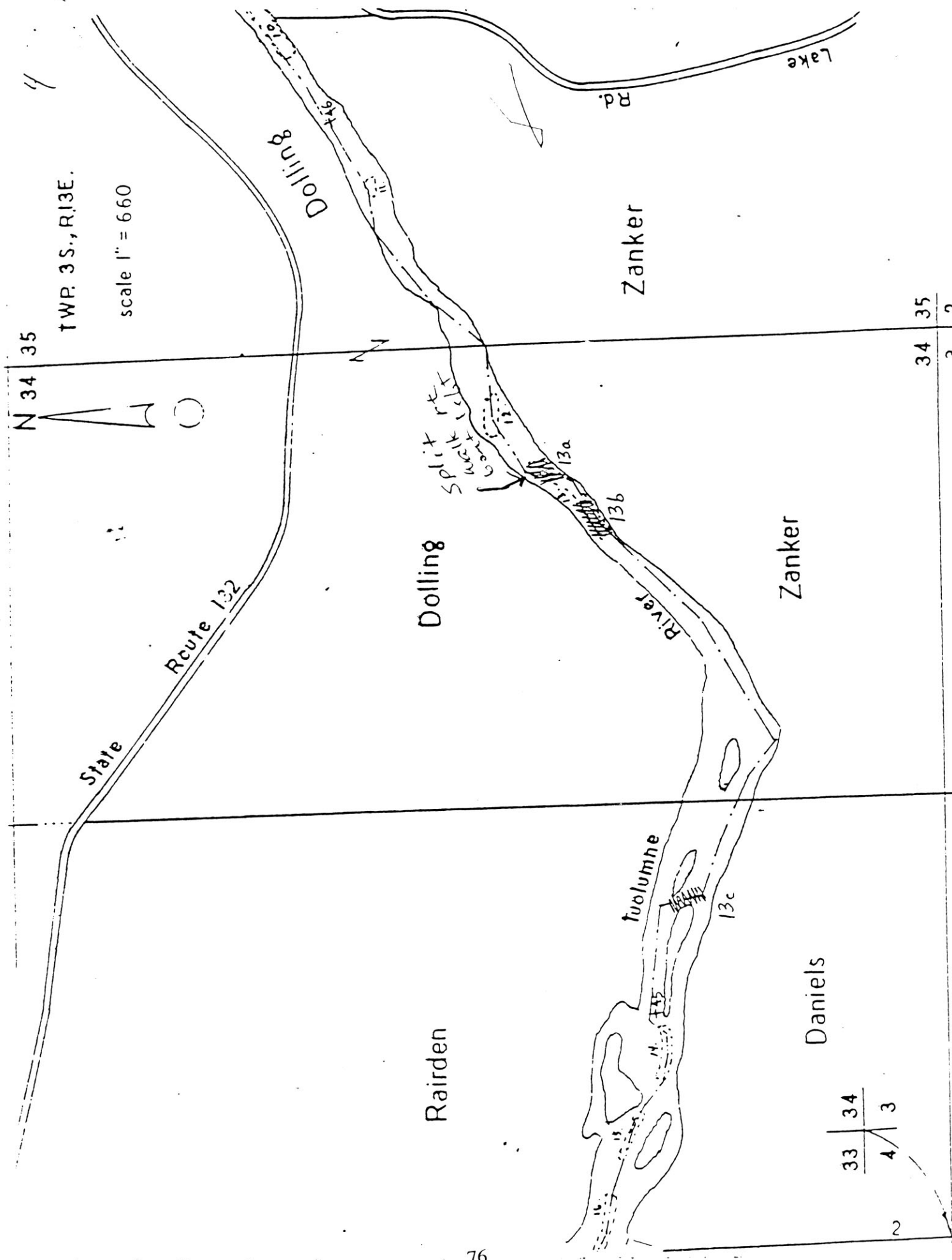
Fine

Zanker

Zanker

Tuolumne River
Mile 45.5
Riffles 13A and 13B

The channel is split at Riffles 13A and 13B. There is a deep channel on the north and vegetation encroachment on the south channel. The overall site is approximately 600 feet long. There is good drop and good vegetation. There is a lot of potential to create diversity at this location. The site is easily accessed from the north off of State Route 132.



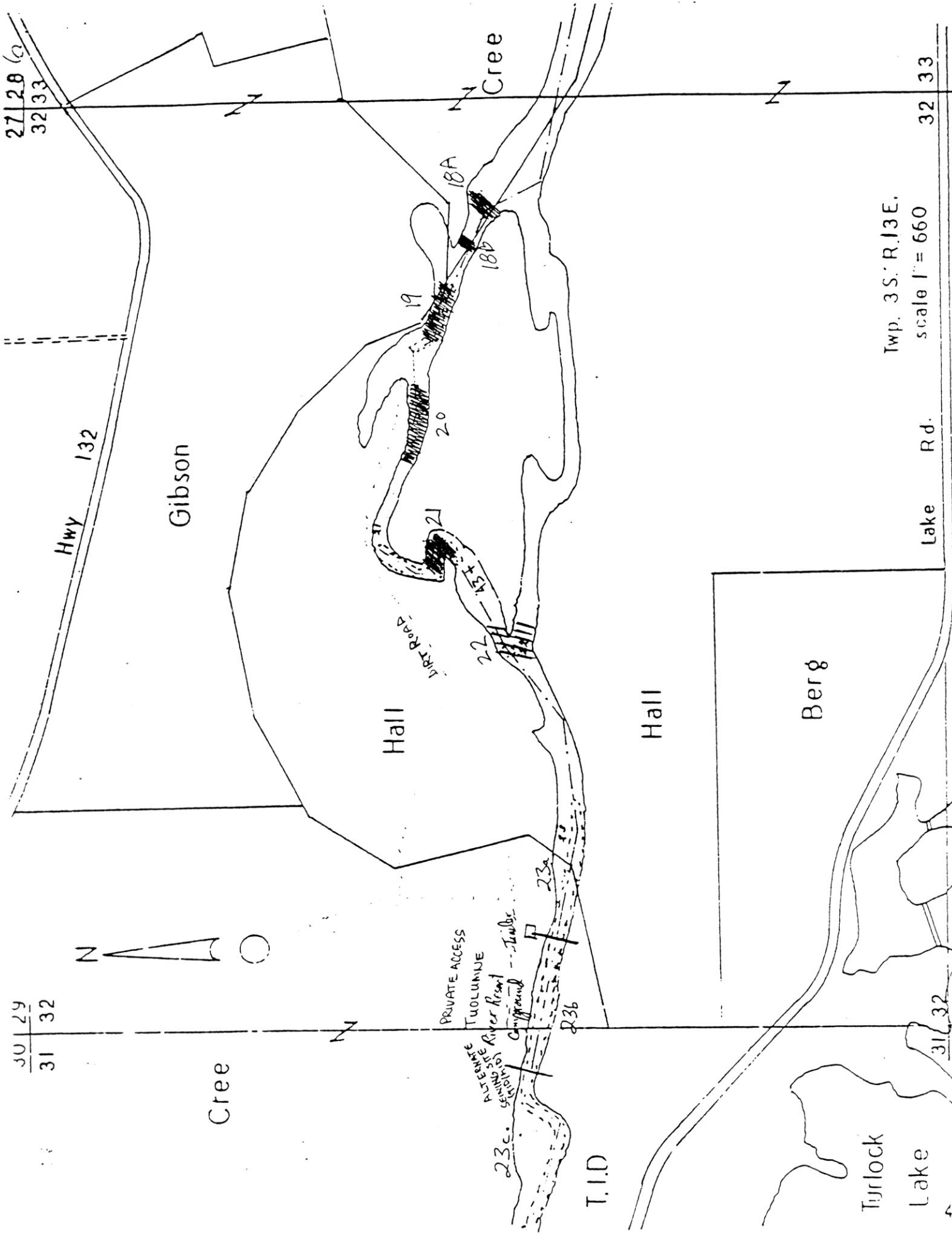
33	34
4	3

34	35
3	2

Tuolumne River
Mile 43.0-43.4
Riffles 19-22

Four riffles exist in a reach of river approximately 1,000 feet long. The river is split at this location and there is significant vegetation encroachment into the channel.

Riffles 19, 20, 21, and 22 could be restored to improve spawning use. Cobble at Riffle 19 could be excavated and replaced with graded, washed spawning gravel. The gravel at Riffles 21 and 22 may only need to be cleaned by ripping. There is good drop over the entire reach and lots of opportunities for creating habitat diversity. The reach is easily accessed off of Highway 132 on the north.



Twp. 3 S. R. 13 E.
scale 1" = 660

Lake Rd.

32 33

31 32

Tuolumne River

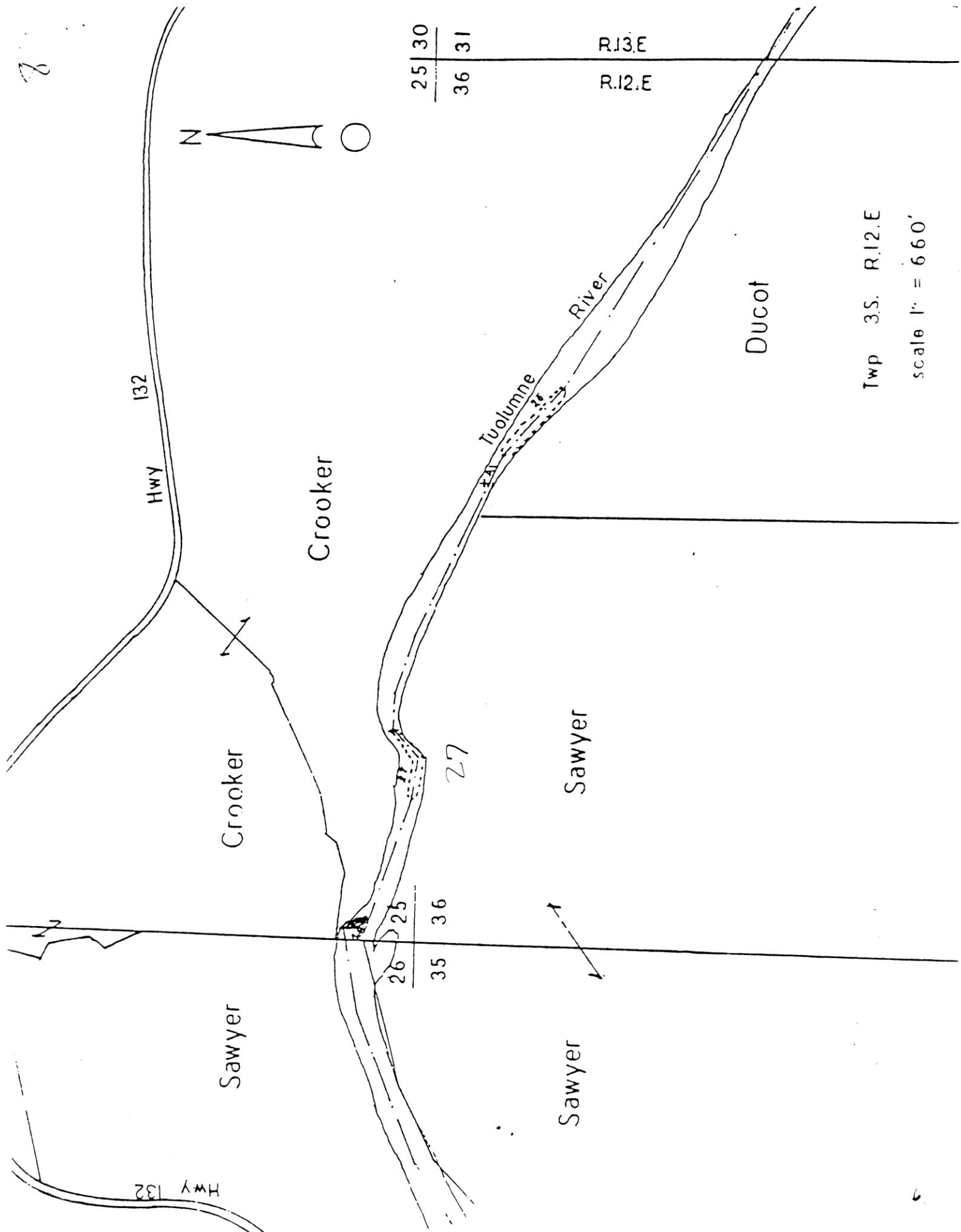
Mile 40.7

Riffle 27

The river makes a 90-degree turn at Riffle 27. There is a rock dam at the head of the riffle making it too deep and fast for spawning. Restoration could involve removing the dam and spreading the drop over the 200-foot reach. The gravel in this riffle also needs to be replaced.

Restoration efforts may be short lived at this location due to the impacts from the sharp turn in the river. Any restoration designs should address how to minimize the impacts of this turn.

The site is easily accessed off of Highway 132 on the north.



Twp 35S. R.12.E

scale 1" = 660'